# SOME NEW FORMS OF PLATYCHEIRUS OF THE FAMILY SYRPHIDAE.

By F. M. Hull, University of Mississippi.

While making a study of the genus *Platycheirus*, the following flies were discovered which appear to be distinct from North American and European species of this interesting genus.

#### Platycheirus flabella n. sp.

Characterized by the black legs, slender anterior tibia and moderately expanded yellow, basal two tarsal joints of the fore legs. Related to *discimanus* Loew.

Male: Length 8.5 mm. Head: The vertex and front and face shining black, the latter with a faint bluish cast and bluishwhite pubescence and all with black pile; the pile is rather thick and long upon the upper half of the front. The antennae are black, the third joint is perhaps slightly brownish, its arista black. The tubercle of the face is well developed, sharp, laterally compressed, slightly concave above and deeply concave below; the face and epistoma are produced forward considerably, though not as much as in manicatus Meigen; the scutellum and pleura are shining black, the sides of the former and most of the latter thinly dusted with white pubescence. The pile of the mesonotum is erect, long and chiefly black with a few light brown and a few almost whitish hairs in the middle of the anterior portion. The pile of the scutellum is very long and sparse. The mesopleural pile is black but is whitish on the sternopleura. Abdomen: Moderately shining black, faintly greenish, becoming brassy on the lateral margin. On either side, and in the middle of the second segment there are small, oval, yellowish-brown spots separated from the lateral margin. There are similar spots upon the third and fourth segment lying close to the base of the segment. The pile of the abdomen is yellowish along the sides, short, appressed and black in the middles of the segments. Legs: Black, the narrow apices of the middle tarsal joint brownish, the extreme apex of the anterior femora and extreme base of its tibiae brownish and the first two tarsal joints of the front tarsi are light brownishyellow, their remaining tarsal joints dark brown. The first tarsal joint is as long as the next three, gradually widening towards the apex where it is a little more than twice as wide as its base: the second joint is considerably less wide than the apex of the first and is but little wider than long. There is a row of regularly spaced, long, black bristles upon the outer, lateral surface of the front tibiae on the apical half and five or six shorter ones on the basal half. The posterior margin of the anterior femora has a row of irregularly spaced, long, black, hairs throughout most of its length. There is no basal black or white hair.

Holotype: a male. Mt. Ranier, Washington, July 1926 (F. M. Hull, collector).

### Platycheirus chirosphena n. sp.

Characterized by the almost wholly black hind femora and the widely black, black pilose hind tibia. Related to poda-

gratus Zetterstedt and erraticus Curran.

Male: Length o mm. Head: The vertex, face, front and occiput bluish-black; the front is widely covered, except just before the antennae, with whitish pubescence which extends widely over the face to leave only the rounded low tubercle and the cheeks bare. The pile is everywhere black except on the lower part of the occiput. The antennae are black, the arista brownish-black. Thorax: Mesonotum shining bluish-black, more brassy on the posterior part of the mesonotum and upon the scutellum, and particularly so in front of the scutellum. The pile of the mesonotum is sparse and yellowish white with abundant similar pile upon the mesopleura and pteropleura. The pile of the scutellum is longer on the margin, is short and whitish on the disc and yellowish upon the margin. Abdomen: Elongate, slender and a little narrower upon the third and fourth segments; it is shining black with a very faint bluish cast, especially upon the first and second segments. There is a pair of small, transversely oval, very widely separated, orange spots on the second segment that begin at or just beyond the middle and are therefore closer to the posterior border and narrowly separated from the lateral margins. The third segment has much larger, less widely separated, bright orange spots lying almost upon the base of the segment; their medial margins are broadly rounded and these spots reach the base laterally and almost reach the lateral margin. There are similar spots which are not quite so long upon the base of the fourth segment. The pile of the abdomen along the sides is yellowishwhite, but is blackish over most of the black area. Legs: First four legs light vellowish-brown: the middle femora are

darker brown on the posterior surface, the anterior tibiae vellowish-white distally and upon the first basi tarsi. hind femora are black almost throughout with an extremely narrow, limited trace of yellow upon the narrow base where it joins the trochanter and the narrow apex vellowish. sixth, and the apical sixth or less, of the hind tibiae are vellowishbrown, their middles blackish and widely black pilose. The hind basitarsi are black, black pilose and rather thickened except at the ends. The second and third joints and their tarsi are yellowish-brown, the apical joints dark. The middle femora ventrally have three long black hairs in the middle and also posteriorly along the middle of the posterior margin on the apical half there is a row of long, fine dark hairs. The pile of their tibiae is inconspicuous except for a row of brown, curly hair along the anterior edge which disappears upon the apical fifth. The anterior tibiae are gradually widened; the first joint of their tarsi is moderately wide and the remaining joints gradually decrease. The discal anterior margin of the anterior tibiae and the adjacent margin of the first tarsal joint are blackish; the anterior femora have a single, long, white, basal, posterior hair and ventrally near the base four to five. widely spaced, long, black, bristly hairs. Wings: pale brownish hyaline, the stigmal cell vellowish.

Holotype: a male. Oliver, British Colombia, May 6, C. Garrett.

## Platycheirus pauper n. sp.

Related to *discimanus* Loew. Characterized by the gray dusted, aeneus spots of the abdomen, the posterior black border of the front tibia and the very narrowly dilated anterior tibia.

Male: Length 7 mm. Head: The vertex is shining black and black pilose with considerable golden pile behind on the occiput. Front brassy-black, partly obscured by sparse grey pollen; the pile is thick, quite long and black. The face is short with a quite small tubercle, is quite low and is metallic black with sparse grey pubescence and long black pile. The first two joints of the antennae are black, the third reddishbrown to black; the arista is short, strongly thickened and dark brown. Thorax: Mesonotum shining black, bright brassy widely upon the sides; the pile is yellowish-brown, abundant and long. Pleural pile yellowish. Scutellum and its pile concolorous with that of the mesonotum but more reddishgolden and a little longer. Abdomen: Slender, a little narrower past the long second segment; the second segment is feebly

shining black and bright brassy upon the sides but is without either aeneous or hoary or yellowish spots. The third segment has a pair of longer than wide, widely separated, subrectangular, hoary grevish spots that are bright brassy towards the The yellowish-grey pollen of these spots is more apparent when viewed posteriorly. The fourth segment has similar, equally large basal spots and the fifth segment throughout both its middle and sides is brassy-black. Hypopygium brassy black. Pile upon the sides of the abdomen pale, sparse. very short and narrowly blackish through the middle. Legs: All of the femora are shining black and very narrowly light brown at their apex; the hind tibiae are widely black through the middle, the basal third and extreme apex vellowish-brown. their pile short, but golden even on the black areas. Pile of hind femora golden, the first four joints of their tarsi brownishblack the last joint brown. The middle tibiae have a short brown annulus just past the middle antero-ventrally; these tibiae have a row of short, curled, dark brown hairs that are more abundant throughout the middle and disappear near the apex. Middle tarsi brownish-yellow. Middle femora with three or four long, slender black hairs posteriorly upon the apical fifth. The anterior tibiae are brownish-black along their antero lateral margins but become light reddish near the base and whitish quite close to the apex. On the medial anterior margin the apical fifth or more of the tibiae is white and the remainder of this and the anterior surface vellowish-brown. These tibiae are only slightly dilated apically but the expansion is gradual throughout the length. The anterior tarsi are entirely light brownish-yellow, very little widened and flattened, the first joint is a trifle longer than the next two joints and scarcely if any wider. Wings: Strongly tinged with brown, the stigmal cell brown.

Holotype: a male. Trail Ridge Road, Colorado (M. T. James).

#### Platycheirus thylax n. sp.

Related to *discimanus* Loew. Face very wide and inflated; anterior tibia yellow at apex and widely at base, not dilated. The disk of the tarsus consists of only the first two segment.

Male: Length 6.5 mm. Head: The vertex is bluish-black and black pilose. The front is also bluish-black with long, dark brown or black pile. The face is exceedingly wide and swollen and inflated with small but sharp tubercle and pro-

tuberant epistoma. There are deep creases ending in a puncture on the lower side of the face upon the eye margins. cheeks are wide but very short and swollen. Thorax: Mesonotum and pleura shining bluish or greenish-black with thick, brown pile. Scutellum very dark brown with slight greenish cast and long, thick, brown pile, Abdomen: Slender, dark, dull brown, more shining along the sides, without spots on the second segment but with a trace of reddish, obscure, small spots basally upon the sides of the third and fourth segments. Legs: The middle and posterior legs are light brown; the middle tarsi are slightly more vellowish. The anterior femora are also brown and without special hairs at the base; upon the posterior margin there are four or five, very slender, rather long, reddish-brown hairs upon the middle area that begin fairly close to the base. The apex of the femora and the basal third of their tibiae and the narrow apex of their tibiae are diffusely and obscurely light vellowish. The anterior tarsi are whitish on the anterior surface; the first joint is longer than the next three joints and almost as long as the remaining four; it is quite flattened and considerably widened and regularly expanded towards its apex. The second joint is almost as wide as the first joint and is twice as wide as long. The first three joints are whitish with whitish pile, the last two brown. There are three, small, brown spots and a narrow, bent, black line and a longitudinal, marginal, brown stripe anteriorly upon the ventral surface of the first tarsal joint. The anterior tibiae are simple and not dilated.

Holotype: a male. Alymer, Quebec.

Note.—In order to enable Dutch scientists to acquaint themselves as soon as possible after hostilities cease with the various publications in scientific papers which do not reach them at present, and to assist them in establishing still closer contact with British and American science than existed before the war, the Netherland Government Commission for Scientific Documentation has been constituted. Dr. J. H. De Boer, Professor in the Imperial College of Science and Technology (London) is Chairman and Ir. A. F. H. Blaauw, Unilever House, London, is Hon. Secretary. A depository library of the Commission has been established in the United States, c/o Mr. F. Verdoorn, Chronica Botanica, Waltham, Mass.